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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/784,121	02/20/2004	Joseph A. Perault	M2010-700019	5280
37462	7590	12/29/2004	EXAMINER	
LOWRIE, LANDO & ANASTASI RIVERFRONT OFFICE ONE MAIN STREET, ELEVENTH FLOOR CAMBRIDGE, MA 02142			FERGUSON, MARISSA L	
			ART UNIT	PAPER NUMBER
			2854	

DATE MAILED: 12/29/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/784,121

Applicant(s)

PERAULT ET AL.

Examiner

Marissa L Ferguson

Art Unit

2854

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 February 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-15 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 February 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>2/20/04</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Objections

1. The specification is objected to because of the following informalities: On page 1, the related applications listed are objected to because of the blank lines. Applicant did not list the patent numbers associated with the titled patent listed. Appropriate correction is required.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 4, 5, 8 and 13-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bennett et al. (US Patent 6,036,787) in view of Foret (US Patent 3,620,230).

Regarding claims 1, 5, 8, 14 and 15, Bennett et al. teaches a wiper blade (13) to wipe the stencil (14), a material applicator to apply material on a stencil (Figure 3 and Column 1, Lines 52-55) and a plenum chamber (15) in fluid communication with the wiper blade. However, he does not explicitly disclose a vacuum generator attached to and in fluid communication with the plenum chamber to create a vacuum within the plenum chamber. Foret teaches a cleaning information system with a means of generating a vacuum source creating a vacuum that communicates with a chamber (See elements 13, 14, 35, Figure 1 and Column 3, Lines 38-55).

It would have been obvious at the time the invention was made to a person having ordinary skill in the art to modify the invention as taught by Bennett et al. to include a vacuum generator as taught by Foret, since Foret teaches that it is advantageous to provide a stable environment in order to permit air pulsation at extremely high rates.

Regarding claim 4, Bennett et al. teaches a means for moving the vacuum plenum module between a first position in which the vacuum plenum is spaced away from the stencil and a second position in which the vacuum plenum engages the stencil (Column 4, Lines 66-67 and Column 5, Lines 1-15).

Regarding claim 13, Bennett et al. teaches a supply roller (3) to receive a roll of paper (1), a take-up roller (21) to receive used paper and a drive (35,37) to move paper across the stencil between the supply roller and the take-up roller wherein the vacuum plenum module is operable to selectively engage the stencil with the paper disposed between the wiper blade and the stencil (Figure 1).

3. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bennett et al. (US Patent 6,036,787) in view of Foret (US Patent 3,620,230) as applied to claim 1 above, further in view of Doyle (US 5,918,544).

Bennett et al. and Foret teach the invention claimed with the exception of a means for introducing pressurized fluid into the vacuum generator. Doyle teaches a web cleaning system with a controller system (24) that introduces a pressurized solvent (25). It would have been obvious at the time the invention was made to a person having ordinary skill in the art to further modify the invention as taught by Bennett et al. to

include a controller as taught by Doyle, since Doyle teaches that it is advantageous to provide a delivery of solvent under pressure in order to perform a uniform and consistent application of solvent to a web.

4. Claims 3,6,7 and 9-12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bennett et al. (US Patent 6,036,787) in view of Foret (US Patent 3,620,230) as applied to claims 1,4,5,8,13 and 15 above, further in view of Hamasaki et al. (US 5,976,269).

Bennett et al. and Foret teach the invention claimed including an air supply hose (18) that communicates between a generator (14,35) and an air supply (13) and an exhaust hose (30) in communication between a generator and a filter chamber (5). However, Bennett et al. and Foret do not explicitly disclose at least one vacuum ejector. Hamasaki et al. teaches an air jet mechanism (14, also functions as an air generator) providing an air jet (15) for creating a jet stream of air. It would have been obvious at the time the invention was made to a person having ordinary skill in the art to further modify the invention as taught by Bennett et al. to replace the air generator thereof with the air jet mechanism with an air ejector as taught by Hamasaki et al., since Hamasaki et al. teaches that it is advantageous to provide air jetting in order to improve removal efficiency of solder paste with respect to a mask layer.

Regarding claim 12, Bennett et al. teaches a seal disposed with the opening of the plenum chamber and a generator source (17 and Column 4, Liens 38-46).

Conclusion


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Marissa L Ferguson whose telephone number is (571) 272-2163. The examiner can normally be reached on (M-T) 6:30am-4:00pm and every other(F) 7:30am-4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Hirshfeld can be reached on (571) 272-2168. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Marissa L Ferguson
Examiner
Art Unit 2854

MAF


Daniel J. Colilla
Primary Examiner
Art Unit 2854